

**Dynamic Analytical Capability to Better Understand and Anticipate Extremist Shifts
Within Populations under Authoritarian Regimes
173067**

Year 2 of 3

Principal Investigator: M. L. Bernard / 01463

Investment Area(s): Defense Systems and Assessments

Project Purpose:

The US' inability to adequately assess geopolitical and sociocultural dynamics of extremist groups has led to failures in understanding, anticipating, and effectively responding to shifts in their movements and allegiances. Recent attacks within the US highlight the need to more precisely understand and anticipate changes in societal attitudes and behaviors due to radicalization. This is particularly important, as new terrorist cells have begun in Southeast Asia and Somalia. A significant concern is their stated intent and effort to plan and conduct terrorist attacks against the US.

The purpose of this work is to create a generalizable data- and theory-supported capability to better understand and anticipate (with quantifiable uncertainty): 1) how the dynamics of allegiance formations between various groups and society are impacted by active conflict and by third-party interventions and 2) how/why extremist allegiances co-evolve over time due to changing geopolitical, sociocultural, and military conditions.

We seek to develop a standalone computational assessment tool for evaluating dynamic military, geopolitical, and socioeconomic interaction effects of extremist groups. Using engineering and social science validation techniques, this effort will produce a capability to quantifiably assess current events and choice options ("what-if" queries) concerning geopolitical inter-group/regional dynamics within a distribution of likely rest-of-the-world reactions to investigate underlying attitudinal and behavioral (extremist) shifts across time. The resulting structure will be designed to be broadly applicable across different ethnic, political, and social groups and will focus on specific extremist group behaviors in response to military, social, economic, and political intercessions.

Refereed Communications:

Conference Paper:

Bernard, M (2015). Developing a Capability to Elicit and Structure Psychosocial Decision Information within Computational Models. 6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the Affiliated Conferences, AHFE 2015

Invited talk to the IC regarding this work being developed by this LDRD

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